## REMARKS

The Applicants thank Examiner Alter for her time and consideration given during the telephonic interview of October 30, 2008.

Claims 1, 2, 4, 5, and 7-48 have been rejected by the Examiner. Upon entry of this amendment, Claims 3 and 6 have been cancelled, and Claims 1, 2, 4, 5, and 7-48 will remain pending in this application. The four independent claims are Claims 1, 8, 36, and 40.

Consideration of the present application is respectfully requested in light of the above claim amendments to the application and in view of the following remarks.

### Summary of Telephonic Interview of October 30, 2008

The Applicants and the undersigned thank Examiner Alter for her time and consideration given during the telephonic interview of October 30, 2008. During this telephonic interview, the prior art used to reject the claims was discussed.

The Applicants' representative and Applicants' in-house counsel, Bill Gowanlock, explained to Examiner Alter that the prior art of record does not provide any teaching of a combination that includes an active status indicator comprising a light source that illuminates, the illumination being visible from the exterior and the light source operated by the defibrillation circuitry without user input, wherein the light has a first illumination indicating that the defibrillation circuitry is in the standby state and ready to operate normally in the operational mode and presently maintenance is not required. It was explained that the prior art of record does not teach active status indicators which illuminate. Instead, the prior art uses mechanical devices or liquid crystal displays that do not emit any light.

For example, the Applicants' representative explained that multi-part Liquid Crystal Display (LCD) 62 of Powers et al. (hereinafter, the "Powers reference"), which is prior art of record, does not emit any light. More specifically, it was discussed that LCDs are passive devices that can be illuminated, such as by backlights, but have no inherent illumination.

The Applicants' representative then directed Examiner Alter to U.S. Pat. No. 5,792,190 issued in the name of Olson et al (hereinafter, the "Olson reference"). The Olson reference describes a maintenance indicator 20. Applicant's representative stressed that Olson does not indicate that the maintenance indicator 20 illuminates. Instead, the Olson reference indicates that the maintenance indicator can be a yellow color or black color. Applicant's representative indicated that this description is consistent with a mechanical colored disk which can be rotated to display different colors. Applicant's representative further pointed out that Olson clearly indicated the use of LEDs for other purposes, thus the inventors of the Olson reference knew how to clearly indicate whether something was illuminated or not, or whether the element inherently illuminated, which further supports a conclusion that the maintenance indicator 20 does not illuminate.

The Applicants' representative explained how the LCD 62 of the Powers reference and the maintenance indicator 20 of the Olson reference need a light source in order to be seen in the dark. The Applicants' representative further explained that the status indicators of the prior art, when the defibrillators are in the standby mode, cannot be seen in a dark room. Meanwhile, when the Applicants' defibrillator is in a dark room and in a standby mode, the active status indicator can be seen since it does illuminate.

Examiner Alter stated noted that the claims recite, "capable of illumination," which is not a positive recitation that the light source of Applicants' invention illuminates. The Applicants' representative understood the Examiner's concerns and have adopted the Examiner's suggestion (in this paper) to include the positive recitation that the light source of Applicants' active status indicator positively and expressly --illuminates--.

Examiner Alter expressed that she understood the Applicants' representative comments and the concepts presented by the claims. Examiner Alter indicated that an update search would be conducted after the Applicants submit the proposed changes in a formal amendment.

The Applicants and the undersigned request Examiner Alter to review this interview summary and to approve it by writing "Interview Record OK" along with his initials and the date next to this summary in the margin as discussed in MPEP § 713.04, p. 700-233 (8th Ed., Rev. 6, Sept. 2007).

## Claim Rejections under 35 U.S.C. § 112, second paragraph

The Examiner rejected Claims 2 and 4-5 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. The Applicants respectfully traverse this rejection.

The Examiner stated that Claim 2 is unclear with respect to when the "second illumination" occurs since both the "first" and "second" illumination occur when the system is operating normally. The Applicants appreciate the Examiner's helpful comments. The Applicants have amended Claim 2 in accordance with the Examiner's comments. Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

## Claim Rejections under 35 U.S.C. §102(b)

The Examiner rejected Claims 1-2, 4, 8, 13, 19, 21, 25, 36, 40-41, and 43 under 35 U.S.C. § 102(b) as being unpatentable over the Powers reference.

The Applicants respectfully offer remarks to traverse this rejection. The Applicants will address each independent claim separately because the Applicants believe that each independent claim is separately patentable over the prior art of record.

### Independent Claim 1

The rejection of Claim 1 is respectfully traversed. It is respectfully submitted that the Powers reference fails to describe, teach, or suggest the combination of: (1) defibrillation circuitry housed within (2) an enclosure (3) having an exterior, the defibrillation circuitry including: (4) a switch for switching the defibrillation circuitry from a standby mode to an operational mode, (5) the defibrillation circuitry in the standby mode being–incapable of delivering a shock to a patient; and (6) an active status indicator comprising (7) a light source (8) that illuminates, (9) the illumination being visible from the exterior and (10) the light source operated by the defibrillation circuitry (11) without user input, (12) wherein the light has a first illumination indicating that the defibrillation circuitry is in the standby state and (13) ready to operate normally in the operational mode and (14) presently maintenance is not required, as recited in amended independent Claim 1.

### The Powers Reference

The Powers reference describes a defibrillator 30 illustrated in Figure 3. The defibrillator 30 has a power source such as a removable battery 32, a controller such as CPU 34, and a high voltage delivery system 36 including a capacitor or capacitor bank and appropriate switches (not shown) to deliver a pulse of electrical energy to an electrode connector or interface 38 and then to a patient via electrodes 40. The defibrillator has a visual display 58. Powers reference, column 4, lines 20-33.

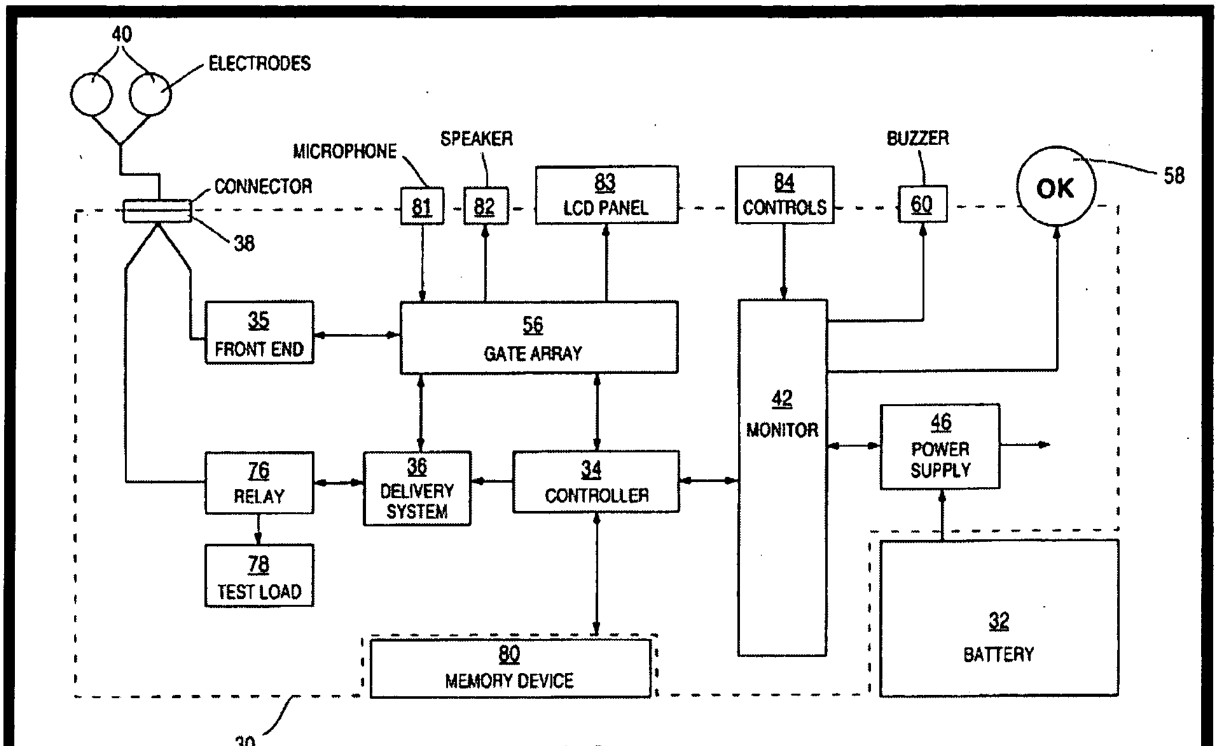


FIG. 3

Delivery of the electrical pulse is controlled by CPU 34. A test and isolation relay 76 and a test load 78 are provided. An ECG front end system 35 acquires and preprocesses the patient's ECG signals through electrodes 40 and sends the signals to CPU 34 via a system gate array 56. System gate array 56 is a custom application specific integrated circuit (ASIC) that integrates many of the defibrillator's functions, such as display control and many of the instrument control functions, thereby minimizing the number of parts and freeing up main CPU time for use in other tasks. Powers reference, column 4, lines 35-45.

In the embodiment shown in FIG. 3, system monitor 42 is separate from CPU 34 so that power can be provided to the system monitor without powering any other part of the defibrillator. Thus, system monitor 42 has its own power supply 44 apart from the defibrillator power supply 46, as shown more specifically in FIG. 4. This dedicated power supply 44 draws approximately 30 microamps from battery 32 and is active whenever power is available from the battery. The dedicated system monitor power supply may also have its own battery apart from the main battery. Powers reference, column 4, lines 64 through column 5, line 6.

Further details of the visual display 58 are illustrated in Figure 5 of the Powers reference. In a preferred embodiment, the system monitor 42 powers a status indicator consisting of a visual display 58 and a piezo buzzer 60 to indicate the operational status of the defibrillator to a user. As shown in more detail in FIG. 5, visual display 58 may be a multiple-part LCD 62 powered by the system monitor via AC-coupled drive 72. Powers reference, column 5, lines 33-38.

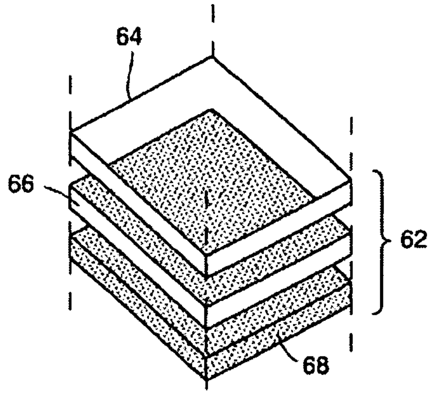


**FIG. 5a**

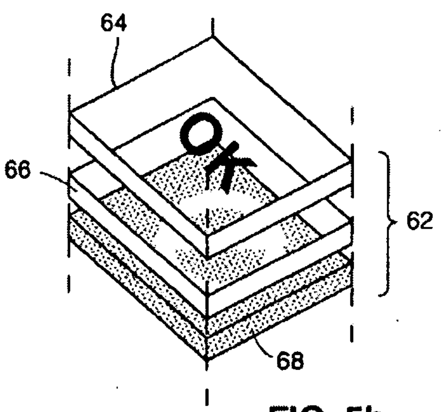


**FIG. 5b**

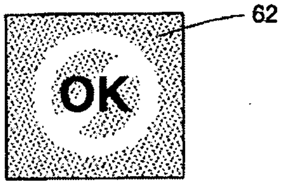


**FIG. 5c**

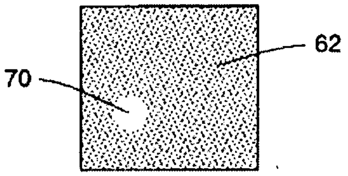


**FIG. 5d**

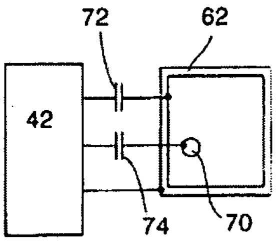


**FIG. 5e**

The top plate 64 of the LCD is a clear window with an "OK" symbol printed on its back. The middle plate 66 is an LCD shutter that is biased so as to be opaque when driven by the system monitor via drive 72. The bottom plate 68 has an international "Not" symbol on its top surface. Middle plate 66 also includes a separately addressable portion 70 driven by the system monitor via AC-coupled drive 74. Powers reference, column 5, lines 39-45.

In operation, the system monitor 42 drives LCD shutter 66 only when confirmation of successful testing is received within an expected time window. The visual display would then appear as in FIG. 5(d). Failure to receive proper test confirmation within the allotted time window will cause the system monitor to cease issuing drive signals to shutter 66. Shutter 66 will then go transparent to superimpose an international "Not" symbol on the "OK" symbol in the LCD as shown in FIG. 5(c). The system monitor will also then begin powering a piezoelectric failure alert buzzer 60, preferably for 200 msec, every 10 sec, so long as there is power enough to do so. Powers reference, column 5, lines 46-58.

The Examiner states that she considers the illuminated "OK" (LCD display 58) of Powers to be the same as the active status indicator of the claimed invention. As discussed during the Interview, LCDs are passive devices. As such, LCDs, while capable of illumination, do not in and of themselves illuminate. Thus, the "OK" message of the Powers reference, while visible, is not illuminated. More specifically, if the LCD display 58 where taken into a dark room, the "OK" would not be visible. The same argument could be made for the "blinking" separately addressable portion 70. Applicant submits that the Powers reference does not provide any teaching of an active status indicator in a standby mode which illuminates, as now recited in amended independent Claim 1.

Independent Claim 8

The rejection of Claim 8 is respectfully traversed. It is respectfully submitted that the Powers reference fails to describe, teach, or suggest the combination of: (1) defibrillation circuitry housed within (2) an enclosure having (3) an exterior, the defibrillation circuitry including: (4) a battery pack (5) removably connected to said defibrillation circuitry; (6) a switch for switching the defibrillation circuitry from a standby mode to an operational mode, (7) the defibrillation circuitry in the standby mode being incapable of delivering a shock to a patient; and (8) an active status indicator comprising (9) a light source that illuminates, (10) the illumination being visible from the exterior and (11) the light operated by the defibrillation circuitry (12) without user input, (13) wherein the light source is illuminated indicating that the defibrillation circuitry is in the standby state and (14) is ready to operate normally in the operational mode and (15) presently maintenance is not required, as recited in amended independent Claim 8.

Similar to independent Claim 1, the Powers reference noted above all fails to provide a combination that includes an active status indicator comprising a light source that illuminates for a defibrillator in a standby mode.

In light of the differences between amended independent Claim 8 and the Powers reference, one of ordinary skill in the art recognizes that this reference cannot anticipate the recitations as set forth in amended independent Claim 8. Accordingly, reconsideration and withdrawal of the rejection of Claim 8 under 35 U.S.C. §102(b) are respectfully requested.

Independent Claim 36

The rejection of Claim 36 is respectfully traversed. It is respectfully submitted that the Powers reference fails to describe, teach, or suggest the combination of: (1) providing defibrillation circuitry housed within (2) an enclosure; (3) providing a processor programmed to periodically test the operability of the defibrillation circuitry; (4) switching the defibrillation circuitry from a standby mode to an operational mode (5) with a switch, (6) in the standby mode the defibrillation circuitry is incapable of delivering a shock to a patient; (7) providing an active status indicator comprising (8) a light source (9) that illuminates, (10) the illumination being visible from the exterior and (11) the light operated by the defibrillation circuitry (12) without user input, and (13) illuminating the light source with a first illumination indicating that the defibrillation circuitry is in the standby mode and (14) is ready to operate normally in the operational mode and (15) presently maintenance is not required, as recited in amended independent Claim 36.

Similar to independent Claim 1, the Powers reference fails to provide a combination to include an active status indicator comprising a light source that illuminates for a defibrillator in a standby mode.

In light of the differences between amended independent Claim 36 and the Powers references, one of ordinary skill in the art recognizes that this references alone cannot anticipate the recitations as set forth in amended independent Claim 36. Accordingly, reconsideration and withdrawal of the rejection of Claim 36 under 35 U.S.C. §102(b) are respectfully requested.

Independent Claim 40

The rejection of Claim 40 is respectfully traversed. It is respectfully submitted that the Powers reference fails to describe, teach, or suggest the combination of: (1) providing defibrillation circuitry housed (2) within an enclosure; (3) providing a battery pack (4) removably connected to said defibrillation circuitry; (5) switching the defibrillation circuitry from a standby mode to an operational mode (6) with a switch, (7) in the standby mode the defibrillation circuitry is incapable of delivering a shock to a patient; (8) providing an active status indicator comprising (9) a light source (10) that illuminates, (11) the illumination being visible from the exterior and (12) the light source operated by the defibrillation circuitry (13) without user input, and (14) illuminating the light source indicating that the defibrillation circuitry is in the standby mode and (15) is ready to operate normally in the operational mode and (16) presently maintenance is not required, as recited in amended independent Claim 40.

Similar to independent Claim 1, the Powers reference fails to provide a combination that includes an active status indicator comprising a light source that illuminates for a defibrillator in a standby mode.

In light of the differences between amended independent Claim 40 and the Powers reference, one of ordinary skill in the art recognizes that this reference alone cannot anticipate or render obvious the recitations as set forth in amended independent Claim 40. Accordingly, reconsideration and withdrawal of the rejection of Claim 40 under 35 U.S.C. §102(b) are respectfully requested.

**Claim Rejections under 35 U.S.C. §102(b) & 103(a)**

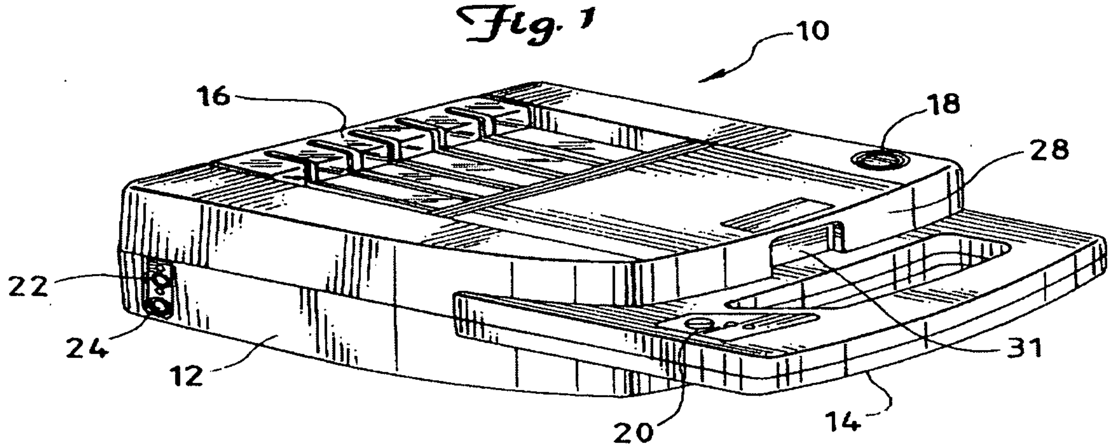
The Examiner rejected Claims 1-2, 4-5, and 7-48 under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 103(a) as being unpatentable over the Olson reference.

The Applicants respectfully offer remarks to traverse this rejection. The Applicants will address each independent claim separately because the Applicants believe that each independent claim is separately patentable over the prior art of record.

The Olson Reference

The Olson reference describes a semi-automatic, automated external defibrillator (AED) 10 illustrated in Figure 1 (reproduced below). The defibrillator 10 includes a plastic case 12 with a carrying handle 14 on the top portion. A battery compartment (not visible) in the bottom portion of the defibrillator 10 is enclosed by a semi-transparent battery cover 16. An illuminatable rescue switch 18, visual maintenance indicator 20, data communication port 22 and charging port 24 are located on the outside of case 12 for easy access by an operator. Olson reference, column 2, line 65 through column 3, line 7.

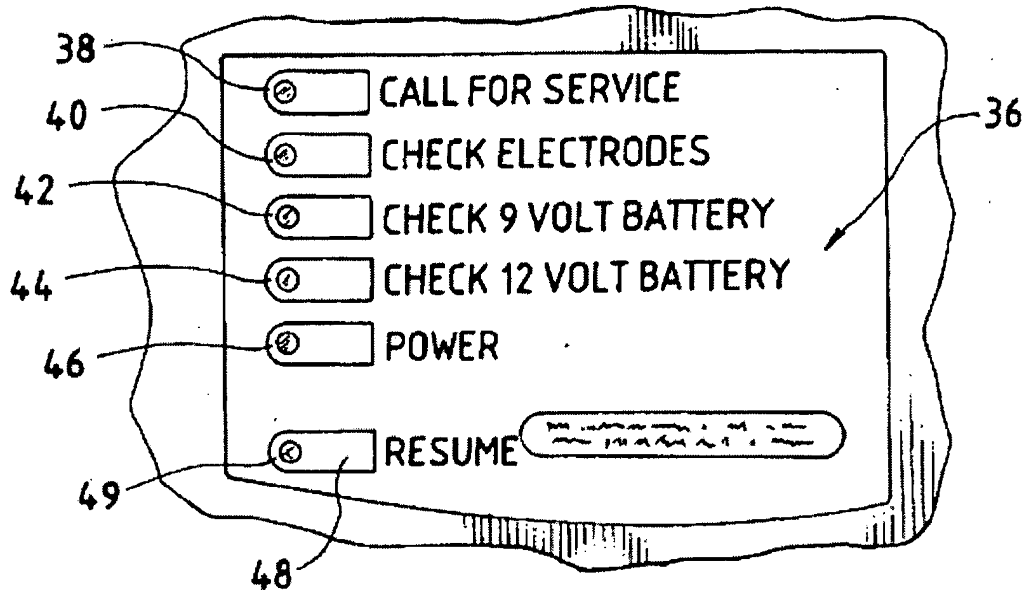
Fig. 1



Case 12 also includes an electrode compartment 26 between handle 14 and battery cover 16. The electrode compartment 26 is enclosed by lid 28 which is mounted to the case 12 by hinges (not visible). A friction-type releasable latch including pins 30 holds lid 28 closed when defibrillator 10 is not in use. The finger-receiving recess 31 in the lid 28 is grasped to open the lid and access the electrode compartment 26. An electrode connector 32, speaker 34 and diagnostic display panel 36 are located on case 12 within the electrode compartment 26. Olson reference, column 3, lines 8-17.

As shown in Figure 4 (reproduced below), diagnostic display panel 36 includes visual "Call for Service" indicator light 38, "Check Electrode" indicator light 40, "Check 9 Volt Battery" indicator light 42, "Check 12 Volt Battery" indicator light 44 and "Power" indicator light 46. Resume switch 48 and resume indicator light 49 are also located on diagnostic panel 36. An instruction and safety label such as that shown in FIG. 7 is located on the inside surface of electrode compartment lid 28. Olson reference, column 3, lines 17-25.

Fig. 4



While the Olson reference does teach the use of light sources which illuminate, such as those in the diagnostic display panel 36 as illustrated in Figure 4 listed above, these light sources are only utilized when the defibrillator 10 is in an operational state or just prior to an operational state while the defibrillator 10 runs self-tests. The Olson reference does not teach the use of light sources in a standby state in which a defibrillator can be switched to an operational state and which are visible on an exterior of the defibrillator 10. As noted above, the diagnostic display panel 36 is located on case 12 within the electrode compartment 26 of the defibrillator 10.

For an active status indicator, the Olson reference uses a maintenance indicator 20 which does not illuminate. The Olson reference explains that visual maintenance indicator 20 can be mechanically switched to a maintenance required state (e.g., a yellow visual display in one embodiment). Olson reference, column 5, lines 45-46. If the lid opened self-test is successfully completed, processor 74 of the Olson reference switches maintenance indicator 20 to an operational state (e.g., a black color in one embodiment), and initiates the generation of an audible "Place electrodes." Olson reference, column 6, lines 21-22.

The Applicants remind the Examiner that a reference must teach every element in order to anticipate a claim under 35 U.S.C. §102(b). Specifically, MPEP § 2131, (Rev. 6., September 2007) page 2100-67 states the following"

> "TO ANTICIPATE A CLAIM, A REFERENCE MUST TEACH EVERY ELEMENT OF THE CLAIM
>
> 'A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.' Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)... 'The identical invention must be shown in as complete detail as is contained in the ... claim.' Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)..."

As discussed during the Interview, the Olson reference does not state that the maintenance indicator 20 illuminates. Applicants submit that since the operation of the maintenance indicator 20 is consistent with a rotating disc, the Examiner has filed to show that the identical invention in the detail claimed is either expressly or inherently described in Olson. In addition, the Olson reference clearly used descriptions, such as LEDs, to indicate items that have the inherent capability of illuminating.

Accordingly, reconsideration and withdrawal of the rejection of independent Claim 1 under 35 U.S.C. §102(b) are respectfully requested.

Applicant respectfully submits that since the Examiner's 103 rejection is directed at another aspect of the claims, and, therefore, does not address this missing element identified above. Therefore, the 103(a) rejection of claim 1 is also traversed.

Independent Claim 8

The rejection of Claim 8 is respectfully traversed. It is respectfully submitted that the Olson reference fails to describe, teach, or suggest the combination of: (1) defibrillation circuitry housed within (2) an enclosure having (3) an exterior, the defibrillation circuitry including: (4) a battery pack (5) removably connected to said defibrillation circuitry; (6) a switch for switching the defibrillation circuitry from a standby mode to an operational mode, (7) the defibrillation circuitry in the standby mode being incapable of delivering a shock to a patient; and (8) an active status indicator comprising (9) a light source that illuminates, (10) the illumination being visible from the exterior and (11) the light operated by the defibrillation circuitry (12) without user input, (13) wherein the light source is illuminated indicating that the defibrillation circuitry is in the standby state and (14) is ready to operate normally in the operational mode and (15) presently maintenance is not required, as recited in amended independent Claim 8.

Similar to independent Claim 1, the Olson reference noted above fails to provide a combination that includes an active status indicator comprising a light source that illuminates for a defibrillator in a standby mode.

In light of the differences between amended independent Claim 8 and the Olson reference, one of ordinary skill in the art recognizes that this reference cannot anticipate nor render obvious the recitations as set forth in amended independent Claim 8. Accordingly, reconsideration and withdrawal of the rejection of Claim 8 under 35 U.S.C. §102(b) or §103(a) are respectfully requested.

## Independent Claim 36

The rejection of Claim 36 is respectfully traversed. It is respectfully submitted that the Olson reference fails to describe, teach, or suggest the combination of: (1) providing defibrillation circuitry housed within (2) an enclosure; (3) providing a processor programmed to periodically test the operability of the defibrillation circuitry; (4) switching the defibrillation circuitry from a standby mode to an operational mode (5) with a switch, (6) in the standby mode the defibrillation circuitry is incapable of delivering a shock to a patient; (7) providing an active status indicator comprising (8) a light source (9) that illuminates, (10) the illumination being visible from the exterior and (11) the light operated by the defibrillation circuitry (12) without user input, and (13) illuminating the light source with a first illumination indicating that the defibrillation circuitry is in the standby mode and (14) is ready to operate normally in the operational mode and (15) presently maintenance is not required, as recited in amended independent Claim 36.

Similar to independent Claim 1, the Olson reference fails to provide a combination to include an active status indicator comprising a light source that illuminates for a defibrillator in a standby mode.

In light of the differences between amended independent Claim 36 and the Olson reference, one of ordinary skill in the art recognizes that this reference alone cannot anticipate nor render obvious the recitations as set forth in amended independent Claim 36. Accordingly, reconsideration and withdrawal of the rejection of Claim 36 under 35 U.S.C. §102(b) or §103(a)are respectfully requested.

Independent Claim 40

The rejection of Claim 40 is respectfully traversed. It is respectfully submitted that the Olson reference fails to describe, teach, or suggest the combination of: (1) providing defibrillation circuitry housed (2) within an enclosure; (3) providing a battery pack (4) removably connected to said defibrillation circuitry; (5) switching the defibrillation circuitry from a standby mode to an operational mode (6) with a switch, (7) in the standby mode the defibrillation circuitry is incapable of delivering a shock to a patient; (8) providing an active status indicator comprising (9) a light source (10) that illuminates, (11) the illumination being visible from the exterior and (12) the light source operated by the defibrillation circuitry (13) without user input, and (14) illuminating the light source indicating that the defibrillation circuitry is in the standby mode and (15) is ready to operate normally in the operational mode and (16) presently maintenance is not required, as recited in amended independent Claim 40.

Similar to independent Claim 1, the Olson reference fails to provide a combination that includes an active status indicator comprising a light source that illuminates for a defibrillator in a standby mode.

In light of the differences between amended independent Claim 40 and the Olson reference, one of ordinary skill in the art recognizes that this reference alone cannot anticipate nor render obvious the recitations as set forth in amended independent Claim 40. Accordingly, reconsideration and withdrawal of the rejection of Claim 40 under 35 U.S.C. §102(b) or §103(a)mare respectfully requested.

Dependent Claims 2, 4, 5, 7, 9-35, 37-39, and 41-48

The Applicants respectfully submit that the above-identified dependent claims are allowable because the independent claims from which they depend are patentable over the cited references. The Applicants also respectfully submit that the recitations of these dependent claims are of patentable significance.

To address Claims 10-12, 16-18, 22-24, 30-32, 42, 44, 46, and 48, the Examiner states that the Olson reference describes the claimed invention except for blinking LEDs. However, as noted above, Olson reference does not provide any teaching of an active status indicator comprising a light source that illuminates for a defibrillator in a standby mode.

In addition, the Applicants wish to address the Examiner's conclusion that it would have been obvious to one of ordinary skill in the art to make an LED blink. The Examiner states that this is obvious since:

> "...it was known in the art to employ blinking LEDs to provide the predictable results of drawing attention to the medical device's operational state. For example, blinking LEDs can be employed when the machine is in the process of dispensing therapy or recharging."

The claims, as amended, clearly state that the AED is in the standby state which is a non-operational state as set forth paragraph [0053] of Applicants' published application. And as such, the AED is incapable of dispensing therapy in this state. Further, the AED is a battery operated device and is not being recharged. As a result, Applicants respectfully submit that the reasoning provided by the Examiner is insufficient under the standards of MPEP 2144.03 to establish a prima facie case of obviousness as to claims .

In view of the foregoing, the Applicants respectfully request that the Examiner withdraw the pending rejections of dependent Claims 2, 4, 5, 7, 9-35, 37-39, and 41-48.

## CONCLUSION

The foregoing is submitted as a full and complete response to the Non-Final Office Action mailed on September 26, 2008. The Applicants and the undersigned thank Examiner Alter for consideration of these remarks. The Applicants have amended the claims and have submitted remarks to traverse rejections of Claims 1, 2, 4, 5, and 7-48. The Applicants respectfully submit that the present application is in condition for allowance. Such action is hereby courteously solicited.

If the Examiner believes that there are any issues that can be resolved by a telephone conference, or that there are any formalities that can be corrected by an Examiner's amendment, please contact the undersigned in the Atlanta Metropolitan area (404) 572-2884.

Respectfully submitted,

**/SPW/**
Steven P. Wigmore
Reg. No. 40,447

King & Spalding LLP
34th Floor, IPT Team
1180 Peachtree Street, N.E.
Atlanta, Georgia 30309
Telephone: (404) 572.4600
K&S File No. 11647-105031